

Claims

1. A package for containers such as bottles or cans, in particular beverage containers, folded from a blank, provided with:
 - a substantially closed bottom panel;
 - two side panels, upstanding from the bottom panel, on opposite sides thereof;
 - two upper flaps folded from the side panels over containers arranged on the bottom panel;
 - end wall flaps extending on both sides of each side panel while confining the containers; and
 - 10 - top flaps extending from the upper edges of the end wall flaps facing away from the bottom panel, below or between the upper flaps;
 - wherein at least said two top flaps and/or the upper flaps are attached to each other.
2. A package according to claim 1, wherein the end wall flaps are
15 mutually connected on both ends of the bottom panel by edge flaps extending from the bottom panel.
3. A package according to claim 2, wherein the edge flaps are connected to the end wall flaps by folding flaps, such that the package can be folded from a planar blank.
- 20 4. A package according to any one of the preceding claims, wherein the end wall flaps overlap, at least partly.
5. A package according to any one of the preceding claims, wherein a first upper flap rests on the top side of the containers, while on the upper side of the first upper flap at least one glue trace is provided which extends along at
25 least one edge and preferably along three edges of said first upper flap, the top flaps and a second upper flap being fastened to the first upper flap with the aid of said at least one glue trace.

6. A package according to claim 5, wherein said at least one glue trace is built up from individual glue surfaces such as drops.
7. A package according to any one of the preceding claims, wherein, in both upper flaps, recesses are provided overlapping each other at least partly, while in the recesses in the overlying upper flap folding lips are provided which are or can be pressed through the underlying recesses, such that said folding lips connect the two upper flaps and engagement openings are provided for lifting the package.
8. A blank for a package for containers, in particular beverage containers such as cans or bottles, provided with:
- a substantially closed bottom panel;
 - two side panels connected to the bottom panel via first fold lines extending parallel to each other;
 - first and second upper flaps connected to the side panels via fifth fold lines extending substantially parallel to the first fold lines;
 - end wall flaps connected to the side panels via third fold lines extending substantially at right angles to the first and fifth fold lines; and
 - top flaps connected to the end wall flaps via sixth fold lines extending approximately in line with, at least substantially parallel to the fifth fold lines.
9. A blank according to claim 8, further provided with edge flaps connected to the bottom panel via second fold lines extending approximately in line with, at least parallel to the third fold lines.
10. A blank according to claim 9, wherein each edge flap, via an eighth fold line, is connected to a substantially triangular folding flap, which folding flap is connected to an end wall flap via a seventh fold line.
11. A blank according to any one of claims 8 – 10, wherein the bottom panel has a width viewed in the longitudinal direction of the second fold lines and a length viewed in the longitudinal direction of the first and fifth fold lines, while the joint length of the end wall flaps, measured approximately at

right angles to the third fold lines, is approximately equal to or slightly greater than the width of the bottom panel.

12. A blank according to any one of claims 8 - 11, wherein the side panels have a height, measured between the respective first and fifth fold lines, while the end wall flaps have a height which is substantially equal to the height of said side panels.

13. A blank according to any one of claims 8 - 12, wherein the top flaps have a length, measured approximately at right angles to the sixth fold lines, which is approximately equal to or slightly smaller than the length of the upper flaps, measured approximately at right angles to the fifth fold lines.

14. A blank according to any one of claims 8 - 13, wherein the upper flaps have a length such that, with the package set up, they overlap while in each of the upper flaps at least two recesses are provided, while in the recesses of at least one upper flap folding lips are provided, connected to the respective upper flap via a fold line, which folding lips widen somewhat from said fold line, while the greatest width of the folding lips is greater than the greatest width of the recesses in the other upper flap, measured approximately parallel to said fold line.

15. Use of a blank according to any one of claims 8 - 14, wherein on the bottom panel at least one row of containers is arranged, which containers are arranged against each other and extend along the longitudinal edges of the bottom panel, while, in a suitable order:

- the side panels are folded on opposite sides against the containers;
- the end wall flaps are folded on opposite ends against the containers;
- the first upper flap, the top flaps and the second upper flap are folded over the top side of the containers;
- while the top flaps are received between the containers and the first upper flap and/ or between the first and/or the second upper flap; and
- wherein the first and second upper flap are connected to each other and/or to the top flaps.

16. Use of a blank according to any one of claims 9 - 14, wherein on the bottom panel at least one row of containers is arranged, which containers are arranged against each other and extend along the longitudinal edges of the bottom panel, while in a suitable order:

- 5 - the side panels are folded on opposite sides against the containers;
- the edge flaps are folded on opposite ends against the containers;
- the end wall flaps are folded on opposite ends against the containers and/or the edge flaps;
- the first upper flap, the top flaps and the second upper flap are
- 10 folded over the top side of the containers;
- while the top flaps are received between the containers and the first upper flap and/or between the first and/or second upper flap; and
- wherein the first and second upper flap are connected to each other and/or the top flaps.

15 17. An apparatus for forming a package from a blank according to any one of claims 8 - 14, provided with:

- arranging means for arranging at least one row of containers on the bottom panel, against each other and along the longitudinal edges of the bottom panel;
- 20 - first folding means for folding the side panels on opposite sides against the containers;
- second folding means for folding the end wall flaps on opposite ends against the containers;
- third, fourth and fifth folding means for folding the first upper flap,
- 25 the top flaps and the second upper flap, respectively, over the top side of the containers; and
- fastening means for connecting the first and second upper flap to each other and/or to the top flaps.

18. An apparatus for forming a package from a blank according to any
30 one of claims 9 - 14, provided with:

- arranging means for arranging at least one row of containers on the bottom panel, against each other and along the longitudinal edges of the bottom panel;
 - first folding means for folding the side panels on opposite sides
5 against the containers;
 - sixth folding means for folding the edge flaps on opposite ends against the containers;
 - second folding means for folding the end wall flaps on opposite ends against the edge flaps and/or the containers;
 - 10 - third, fourth, and fifth folding means for folding the first upper flap, the top flaps and the second upper flap, respectively, over the top side of the containers; and
 - fastening means for connecting the first and second upper flap to each other and/or the top flaps.
- 15 19. An apparatus according to claim 17 or 18, wherein the apparatus is designed for feeding-through the blanks in a feeding direction, the folding means being arranged such that during feed-through, different folding movements can be carried out without the bottom panel being rotated.
- 20 20. An apparatus according to any one of claims 17 to 19, wherein the fastening means comprise gluing means, designed for applying glue to a side of the first upper flap remote from the containers, in particular a glue trace extending along at least one side, more in particular along the respective second fold line and, preferably, along three sides of the upper surface.
21. A method for forming a package for containers such as beverage
25 cans or bottles, comprising the steps of:
- arranging at least one row of containers on the bottom panel of a blank, against each other and along the longitudinal edges of the bottom panel;
 - folding the side panels, connected to the bottom panel via fold lines on opposite sides against the containers;

- optionally folding edge flaps connected to the bottom panel and/or end wall flaps on opposite sides against containers;
- folding end wall flaps connected to the side panels on opposite sides against the optional edge flaps and/or containers;
- 5 - folding a first upper flap connected to the first side panel; top flaps connected to the end wall flaps; and a second upper flap connected to a second side panel, over the top side of the containers; and
- connecting the first and second upper flap to each other and/or to the top flaps.